InSphero AG
Wagistrasse 27
CH-8952 Schlieren
Switzerland
Tel: +41 44 515049-0
Fax: +41 44 515049-1
www.insphero.com

Media Release – For Immediate Distribution

InSphero launches industry's first automation-compatible 3D human liver disease platform for NASH drug discovery and screening

3D InSight™ Human Liver Disease platform provides the most physiologically relevant testing environment for efficacy and safety

Schlieren, Switzerland – July 16, 2019 InSphero AG today announced a breakthrough in 3D cell technology for drug discovery and safety testing with the launch of its 3D InSight™ Human Liver Disease Discovery Platform for non-alcoholic fatty liver disease (NAFLD) and non-alcoholic steatohepatitis (NASH). The platform has been precisely engineered to include all the human liver cell types and inducers necessary to replicate progression of NASH in patients, from fatty liver (steatosis) to inflammation (NASH) and scarring (fibrosis) of the liver. This game-changing preclinical discovery platform enables scalable *in vitro* drug efficacy assessment, screening, combinatorial testing as well as the study of complex NASH pathophysiology.

"Development of novel therapeutics for NASH has been impeded by the lack of predictive *in vitro* models that reflect the complex mechanisms underlying disease initiation and progression in patients," says InSphero CEO and co-founder Dr. Jan Lichtenberg. "With the 3D InSight™ Human Liver Disease Platform for NAFLD and NASH, we are filling a huge unmet need in the research community for fast, efficient screening of drug candidates."

NASH is the most severe form of NAFLD, a group of chronic conditions caused by accumulation of excess fat in liver cells. Characterized by inflammation and fibrosis, NASH can progress asymptomatically to more serious disease stages, including advanced liver fibrosis, cirrhosis, and cancer. Closely related to the growing epidemic of obesity and type 2 diabetes, prevalence of NASH is rising rapidly and thought to affect ~10% of the adult population in Western countries. It is expected to be the leading cause of liver transplants in the United States by 2020. There are currently no approved medications or therapies available.

"Modelling all the elements of this human disease has been extremely challenging, adds Dr. Scott Friedman, Dean for Therapeutic Discovery and Chief of Liver Diseases at the Icahn School of Medicine at Mount Sinai. "Drug screens with animal models of NASH can take months and do not always accurately reflect whether a drug will work on humans. InSphero's platform offers a possible alternative for rapid screening of large numbers of drugs and combinations of drugs at different doses."

InSphero is currently partnering with NASH drug developers to integrate this automation-compatible platform into their discovery workflows.

Future releases will apply the company's Akura™ Flow organ-on-a-chip technology to combine liver disease and diabetes platforms into one system for the study of systemic metabolic disease.

For more information about the 3D InSight™ Human Liver Disease Platform for NAFLD and NASH, visit www.insphero.com/.

# # #

InSphero Contacts

Dr. Frank Junker
Chief Business Officer
Phone +41 44 5150490
frank.junker@insphero.com

About InSphero

InSphero is the pioneer of industrial-grade, 3D-cell-based assay solutions and scaffold-free 3D organ-on-a-chip technology. Through partnerships, InSphero supports pharmaceutical and biotechnology researchers in successful decision-making by accurately rebuilding the human physiology *in vitro*. Its robust and precisely engineered suite of 3D InSight™ human tissue platforms are used by major pharmaceutical companies worldwide to increase efficiency in drug discovery and safety testing. The company specializes in liver toxicology, metabolic diseases (e.g., T1 & T2 diabetes and NAFLD & NASH liver disease), and oncology (with a focus on immuno-oncology and PDX models). The scalable Akura™ technology underlying the company's 3D InSight™ Discovery and Safety Platforms includes 96 and 384-well plate formats and the Akura™ Flow organ-on-a-chip system to drive efficient innovation throughout all phases of drug development.

Learn more at www.insphero.com and follow us on Twitter and LinkedIn.

Images